

Promotion Examination Regulations

AND

Limit Table

FOR THE

London Public Schools.

Fourth Edition.

REVISED.

Fourth Thousand.



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PROMOTION EXAMINATION REGULATIONS
AND
LIMIT TABLE
FOR THE
LONDON PUBLIC SCHOOLS.

No. Public School Buildings 18 : No. Class Rooms 127 : No. Public School Teachers 112 : No. Kindergarten Directors 15 : No. Assistant Directors 15 : No. Music Teachers 1 : No. Art and Drawing Teachers 1.

In future the promotion examinations in the Public Schools, from Grade I, to Grade VII., inclusive, shall be governed by the following regulations :

1. The teacher of each grade shall, in a book provided for the purpose, and known as the "Class Record Book," enter the name of each pupil in his or her charge, and on or before the last school day of each of the months of October, December, February, April, and June, shall enter in the appropriate place opposite each name the number of days the pupil attended during the previous months, also a number, from 1 to 100, inclusive, in Arithmetic, Grammar, Literature, and Composition, and 1 to 50, inclusive, in Reading, Spelling, Drawing, Writing, Geography and History.

2. The numbers thus entered shall represent the teacher's best judgment of the attainment of the child in the several branches of study during the preceding months, and shall be determined : grades 1 and 2 from the weekly reviews or examinations, and in grades 3 to 7, inclusive from written examinations held during the month. All entries shall be made in ink.

3. Immediately upon the completion of a record, the teacher shall report to the parents, upon a form, provided by the Board, each pupil's standing as shown by that record.

4. To secure the teaching of the whole of the course in each grade, all questions upon which class record is based shall be submitted to the Principal for approval.

5. There shall be a written promotion examination for all pupils not promoted on class record, from printed papers, held once a year, after the 20th of June and before the first of July, in all the subjects, for all the grades from 3 to 7, inclusive, and not more than five questions shall be set on any paper.

6. There shall be two papers in Arithmetic. One shall contain an example in each of the four simple rules, and a bill of parcels: value, 30 marks; time, 30 minutes.

7. The other shall contain five questions: value 70 marks; time, one hour and a half.

8. But pupils who, on the written examination, have not fallen below 30 per cent. in Arithmetic or Grammar, and 20 per cent. in any other subject, and have made 50 per cent. of the maximum marks, shall be entitled to promotion on such examination alone.

9. Grades 1, 2 and 3 may be promoted at any time on class record alone. All pupils who have a class record of 50 per cent. on the last monthly record, and 50 per cent. for at least one other month, and have not fallen below 30 per cent. in Arithmetic and 20 per cent. in any other subject, shall be promoted at the end of June; and the Principal shall give those pupils who fail to be promoted on class record a formal examination, and promote by the same regulations as govern the higher grades.

10. When a teacher of grades 1, 2 and 3 believes a number of her pupils, or a teacher of grades 4, 5 and 6 believes all her pupils, are prepared for promotion to a higher grade, she should notify the Principal. If he finds them so prepared, and there is no accommodation in the higher grade room; he shall with the consent of the Inspector, direct the teacher to teach the higher grade course to such pupils in her room until they can be accommodated in their proper room and advanced thereto.

11. When the teacher of any grade finds a pupil who shows great capacity for work, and is in advance of the other members of the class, such teacher should report the case to the Principal, and he should at all times promote such pupils from a lower to a higher grade when he is satisfied that such pupil or pupils are qualified for such promotion, and that the best interests of the pupil would be served by such promotion.

12. The Inspector shall, on or before the 1st day of June in each year, call a meeting of the Principals and select a Committee from them to make out the examination papers.

13. Each Principal so selected shall make out the examination papers for all the grades that write on the subject assigned him by the Inspector.

14. The examination papers must be submitted to the Inspector for his approval before being sent to press.

15. As far as possible, the teacher who is to receive the pupils that may be successful at the examinations shall mark the answer papers of those pupils.

16. Five marks for neatness shall be allowed in each of the following subjects: Arithmetic, Spelling, Dictation, Composition, Literature, Grammar, Geography, and History.

17. In every case the marks or value for each answer shall be distinctly written on the margin opposite the answer for which it is given.

18. The examiner shall place the general total on the back of the outside sheet indicating the additional marks for neatness, thus, e.g.: $60 + 3n = 63$.

19. All papers shall be read within ten days after the examination.

20. The assistants who have no examination work to do, or who have but little examination work to do, shall assist in making out the examination sheets when required to do so by the Principal.

21. The teacher who is to receive the pupils when promoted shall receive all the marked answer papers of those pupils, and, either alone or with the help of the assistant appointed by the Principal, shall make out a complete list, in duplicate, giving the name of each pupil and the marks in each subject, and the total marks on all subjects.

22. The Principal shall keep possession of all the answer papers until the 1st day of November, and shall not allow them into the hands of any person during that time without the permission of the Inspector, or the Board of Education, or No. 1 Committee.

23. A copy of the results of the examination shall be filed by the Principal in the Inspector's office within twelve days after the examination.

LIMIT TABLE

THIS LIMIT TABLE IS SUGGESTIVE, AND INDICATES THE COURSE TO BE PURSUED BY EACH GRADE, BUT DOES NOT CONTAIN ALL THE DETAILS OR RELATED TOPICS TO BE TAUGHT.

Grade I

READING.

1. Part I. Reader.
2. Powers and names of single and double consonants, short powers and names of vowels.
3. Detection of points of similarity and dissimilarity in both the oral and the written forms of monosyllables.
4. The pronunciation at sight of monosyllables, containing a short vowel sound.
5. To read with expression any sentences composed of the words in Part I. Reader, either in script or in print.

SPELLING.

1. Oral spelling of all words in Part I. Reader.
2. Written spelling of all words in Part I. Reader, either on slates or on blackboard.

LITERATURE.

Talks with pupils on subject matter of reading lessons.

COMPOSITION

To be able to answer orally, in complete sentences, questions on the reading lessons and familiar objects.

NATURE STUDY AND GEOGRAPHY

NATURE STUDY—Observation of rain, snow, hail, frost, sunshine, rising and setting of sun, clouds and the seasons, sprouting of seeds in spring, roots, stems, buds, leaves and flowers. Special examination of flowers.

STORIES—1. Stories illustrating kindness, sympathy, gentleness, honesty, truthfulness, unselfishness.

2. Stories about birds, animals, plants, seasons, and the industries, pursuits and customs of people, etc.

TALKS ON BEAUTY and care of lawns, shrubs, trees, etc., the destruction of shrubs, trees, etc., on the streets or elsewhere by breaking off branches, the annoyance caused by running across peoples' lawns, etc.

ARITHMETIC.

1. Roman notation to 10; Arabic notation and numeration to 100.
2. Correct and moderately rapid addition of 0, 1, 2 and 3 in columns of 10 addends.
3. Problems, mental, involving addition, when the added-on number is not greater than 3.
4. Analysis and synthesis of 2, 3, 4, 5 and 6.

WRITING

1. Analysis of small letters into elements, height, width and slant.
2. To be able to make the figures and the Roman numerals I, V, X.
3. To write legibly on slate, blackboard, or on paper with a lead pencil.

DRAWING

1. Studies of plants, trees, etc., in color, ink or pencil.
 2. Freehand cutting and drawing of life forms, common objects, toys, etc., associated with child life.
- Animal and figure drawing from memory.

NOTE—These drawings may be made on the blackboard or slates, or with brush or pencil on manilla paper.

3. Illustrative and memory drawing in connection with nature study or the reading lessons, or with appropriate rhymes about childhood.
 4. Picture study.
 5. Design, in simple borders and surface patterns, worked out in cutting of colored papers, sewing with colored wools on perforated cards, or with brush or pencil on manilla paper. The terms unit and repetition should be taught.
 6. The study of flat forms and their facts, by folding, cutting and drawing, square, oblong, etc.
 7. Line drill to secure proper pencil holding and free arm movements.
- Drill in the use of the rule.
8. Paper folding of simple life forms, construction from paper or cardboard of book, picture frame, envelope, cube, square box, rectangular box, sled, etc.
 9. Study of the six standard colors.

FORM AND COLOR STUDY.

1. **SOLIDS**—Cube, sphere, cylinder, right prism, triangular prism, hexagonal and octagonal prism.
2. **SURFACES**—Square, oblong, rhombus, rhomboid, triangle, hexagon, octagon, circle, semicircle.
3. **LINES**—
 - (a) Shape of lines—Straight, crooked, curved.
 - (b) Position of lines—Horizontal, vertical, oblique.
4. **DISTANCE**—Inch, foot, yard.
5. **DIRECTION**—Right, left, up, down, north, south, east, west, above, below, back, front, top, bottom.
6. **COLOR**—The six standard colors, with their shades and tints.

TEMPERANCE AND HYGIENE.

Conversations on eating, drinking, care of teeth, bathing, sleep, clothing, control of temper, effect of alcoholic drinks and tobacco on the system.

MUSIC.

1. Kindergarten songs.
2. First step (Doh, Me, Soh) and the octave : simple time divisions; purity of tone and ear exercises. Rote songs.

DRILL AND CALISTHENICS.

Class-room drill and calisthenics.

Grade II.

READING.

1. Part II. Reader.
2. Complete mastery of phonics for words of one syllable and easy words of two syllables.
3. Detection of points of similarity and dissimilarity in both the oral and the written forms of the words in Part II. Reader.
4. To read intelligibly, and with expression, sentences composed of the words in Part II. Reader, either in script or in print.

SPELLING.

1. Oral spelling of all words in Part II. Reader, special attention to be given to homonyms.
2. Written spelling of words, phrases and sentences of Part II. Reader, on slate, blackboard, or with lead pencil in blank book.

LITERATURE.

Meanings of words and phrases, orally.

COMPOSITION.

1. ORAL—To be able to express in complete sentences ideas of familiar objects, and ideas developed from form and color study, and nature study and stories.

2. WRITTEN—

- (a) Capitalization—Use a capital at beginning of sentence and special names.
- (b) Punctuation—Period and interrogation.
- (c) To copy simple elliptical sentences from black-board, and to write a composition of about 20 words, after the sequent topics of an object lesson, or the subjects embraced in geography or form and color study have been developed and expressed orally.

NOTE—Pupils must be taught to select and arrange the topics coming under the subject of their composition.

NATURE STUDY AND GEOGRAPHY.

1. Review Part I. course.

2. Make map of room, showing position of teacher's desk, etc.; map of school, showing position of all the ground-floor rooms, halls, etc.; map of school ground, showing position of school, etc.

3. Observation of hills, valleys, ravines, streams, ponds, streets, the action of heavy rains in eroding and carrying away earth, and the corrugated surfaces made by such action. Variation in the form and in the time the moon rises; variation in the time and place the sun rises and sets; variations in the length of time between sunrise and sunset at different seasons of the year.

4. The chief productions of Middlesex, with talks on cultivation of fields, harvesting, etc.; butter and cheese making, etc.

5. Systematic trips to places of geographical interest about the city or vicinity.

- 6.
 - (a) Study of plants, fruits, etc., germination of seeds, cuttings to plants, plants from runners.
 - (b) Study of dog, cat, earthworm, frog spawn to tadpole, tadpole to frog, cocoon to butterfly.
 - (c) Talks on birds, animals, people and their customs, habits, industries, etc.

ARITHMETIC.

1. Addition, correctly and rapidly, of all the numbers from 1 to 9, inclusive, in columns of 10 addends.

2. Subtraction, correctly and rapidly; any examples.

3. Analysis and synthesis of all numbers from 2 to 10, inclusive.

4. Arabic and Roman notation and numeration to 1,000.

5. Easy problems, mentally and on slates.
6. THEORY—To point out concrete and abstract number, addend, column, sum, minuend, subtrahend, difference or remainder.

WRITING.

1. Review analysis of small letters.
2. Analysis and principles of capital letters.
3. To write legibly on slate, blackboard, or on paper with lead pencil.
4. To make all the figures and all the Roman numerals.

DRAWING.

1. Plant study—trees, seed-pods, grasses, flowers, fruit, etc., in color, ink or pencil.
2. Study of the type solids, sphere, cube, cylinder, etc., and drawings of objects based on them.

Large objects above the eye and smaller ones below the eye.

Sketches of birds and animals.

Figure drawing from the pose.

3. Illustrative and memory drawing in connection with reading lessons, nature study verses, etc.

4. Picture study.

5. Design of borders and surface patterns, using geometric units, also motives from plant forms.

Striped and figured prints.

Accurate measurements and division of spaces.

6. Study of six standard colors with shades and tints.
7. Study of flat forms continued.
8. Line drill to secure proper pencil holding and free arm movements.
9. Paper folding of simple life forms and construction from paper or cardboard of book, blotter, cornucopia, envelope, basket, box, etc.

FORM, MEASURE, DIRECTION AND COLOR STUDY.

1. SOLIDS—Cube, sphere, cylinder, square prism, triangular prism, hexagonal prism, octagonal prism, square pyramid, triangular pyramid, hexagonal pyramid, octagonal pyramid, cone.

2. SURFACES—Square, oblong, rhombus, rhomboid, triangle, hexagon, octagon, circle, isosceles triangle, equilateral triangle, scalene triangle, semicircle.

3. LINES— $\left\{ \begin{array}{l} (a) \text{ Shape of lines—Straight, crooked, curved.} \\ (b) \text{ Position of lines—Horizontal, vertical, oblique, perpendicular, diameter, diagonal, radius.} \end{array} \right.$

4. ANGLES—Right angle, acute angle, obtuse angle.

5. (a) DISTANCE—Inch, foot, yard, mile, objectively fix the limiting points of the mile on a street.

(b) CAPACITY—Pint, quart, gallon, peck.

6. DIRECTION—Right, left, up, down, north, south, east, west, above, below, back, front, top, bottom.

7. COLOR—The six standard colors, with their shades and tints.

TEMPERANCE AND HYGIENE.

(1) Review Part I, course.

(2) Teach how to stand, sit, rise, walk and breathe.

MUSIC.

1. Bar, measure, two-pulse measure, three-pulse measure, and four-pulse measure.

2. How to write pulse notes and half-pulse notes.

3. How to mark all notes below the tonic and above the leading note.

4. The accented and unaccented or the strong, medium and the weak parts of a measure.

NOTE.—Illustrate the strong part by a large note, and the weak part by a small one.

5. The continuation mark and how silence is indicated.

6. Modulator drill; the third, fifth and octave of the tonic; mental effects of tones; voice training; ear tests, of thirds, fifths and octaves.

DRILL AND CALISTHENICS

(1) Class-room drill and calisthenics.

(2) How to salute, which hand to use in lifting the hat, which side, (right or left) to pass a person on the sidewalk, which side when meeting a person.

GRADE III.

READING.

1. Second Reader to page 102.
2. Complete mastery of phonics for words of one, two and three syllables.
3. To read intelligibly and with expression, Second Reader to page 102.
4. Conversational reading of lessons XIV., XVIII., XXII., XXVIII., XXX., XXXIV., omitting all that is not included in the conversational part of the lessons.

SPELLING.

1. Oral spelling of words in reading lessons; days months and seasons.
2. Written spelling of words, phrases and sentences of reading lessons, days, months and seasons.

LITERATURE.

1. Meanings of words and phrases.
2. To be able to give the homonyms corresponding to those in the reading lessons and their meanings.
3. { (a) To be able to point out the beginning and ending of the paragraphs in the lessons.
(b) To be able to give the topics of the paragraphs.
4. To be able to give the names of all the punctuation marks in the lessons.
5. To know the use of the period, interrogation mark, exclamation mark, hyphen, and quotation marks.

COMPOSITION.

1. ORAL. — { (a) To be able to express in complete sentences ideas of familiar objects and ideas developed from form study, geographical study, temperance and hygiene study.
(b) To be able to change affirmations to negations or interrogations, and *vice versa*.
2. WRITTEN — { (a) Capitalization—Use capital at beginning of sentence and special names.
(b) Punctuation—Period and interrogation at end of sentence, Period after Roman numerals, initial letters and abbreviations.
(c) To copy elliptical sentences from blackboard, and to be able to write a composition of 30 words after the topics of the object lesson, form study, geographical study, etc., have been developed, arranged in order and expressed orally.
(d) To change affirmations to negations or interrogations, or *vice versa*.

GEOGRAPHY.

1. Sketch outline map of School Grounds; City, showing Street Railway, Railroads, Railway Stations, Schools, Collegiate Institute, Normal School, Medical School, principal Churches, Court House, City Hall, Post Office, Custom House, Market, Hospital, Orphans' Home, G. T. R. Shops, Sulphur Springs, Drill Shed, Exhibition Grounds, G. T. R. Roundhouse, Electric Light Station, Gas Works, Asylum, Free Library, Masonic Temple, Oddfellows' Hall, Huron College, Western University, Bridges.
2. To be able to read the time on a clock; time-table.
3. To be able to read a thermometer; its use.
4. The great manufacturing industries of the city, and where situated; some of the imports sold by the merchants; where the goods are made.
5. The chief productions of Middlesex sold on the market.
6. Where the following fuel is obtained, viz.: Charcoal, anturacite bituminous coal, wood and coke.
7. What the following are: Cream, cheese, beef, veal, venison, lamb, mutton, pork, lard, tallow, suet, shorts, bran, flour, macaroni.
8. Observation of trees, plants, flowers, kinds of wood, hills, valleys, ravines, streams, ponds, islands, capes, bays, clouds, rain, snow, hail, ice; where the melted snow and rain go; action of heavy rains in eroding and carrying away earth, etc.; the appearance of ground after such action; appearance of earth, etc., carried, deposited, and settled down in water; systematic trips to places of geographical interest about the city; special study of plants.
9. Definition of island, pond, hill, valley, river, creek, right and left bank, mouth, source, current, rapid, cascade, cataract.

ARITHMETIC.

1. Addition and subtraction, correctly and rapidly.
2. Analysis and synthesis of all numbers from 2 to 12.
3. Arabic notation and numeration to 1,000,000, Roman notation and numeration to 5,000.
4. Multiplication table to 12 times 12.
5. To be able to give the factors of any number, neither of which is greater than 12.
6. Multiplication by two factors, and multiplication of a multiplicand of seven places by a multiplier of four significant figures.
7. Easy problems, mentally and on slates. To be able to express neatly and logically the sequent steps of the solution of a problem in writing.

8. **THEORY**—To point out concrete and abstract number, addend, column, sum, minuend, subtrahend, difference or remainder, multiplicand, multiplier, product, factor; to use correctly the terms notation, Arabic notation, Roman notation, numeration, Arabic numeration, Roman numeration.

9. To know the name and use correctly the symbols $+$, $-$, \times , $=$, \div , c .

WRITING.

1. **ORAL**—Analysis and synthesis of the small and the capital letters.

2. $\left\{ \begin{array}{l} (a) \text{ Position of body while writing.} \\ (b) \text{ Distance of eyes from copy book.} \\ (c) \text{ Position of feet and left hand while writing.} \\ (d) \text{ Position of copy-book on desk.} \\ (e) \text{ Position of pen when writing.} \end{array} \right.$

3. **MOVEMENT**—Proper movement of fingers, hand, wrist and arm while writing.

4. **WRITTEN**— $\left\{ \begin{array}{l} (a) \text{ To be able to express on slates, blackboard or} \\ \text{paper, the elements and principles used in} \\ \text{writing.} \\ (b) \text{ To be able to write legibly with pen and ink all} \\ \text{of No. 1 Copy-book.} \end{array} \right.$

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc., in pencil, ink or color.

Compose studies.

2. Study of type solids and drawings of objects based on them. Large objects above the eye and groups of smaller ones below the eye.

Sketches of birds, animals, etc.

Figure drawing from the pose.

3. Illustrative and memory drawing in connection with other lessons, nature study, composition, literature, etc.

4. Design of borders and surface patterns, for some definite purpose, using geometric units and motives from plantforms.

Stripes and plaids.

Accurate measurements and division of spaces.

5. Study of flat forms.

Line drill to secure proper pencil holding and free arm movement.

6. Picture study.

7. Construction from stiff paper or cardboard of book, blotter envelope, basket, box, calendar, chair, cart, sofa, etc.
The use of half and quarter scales.

FORM.

1. **SOLIDS**—Cube, sphere, cylinder, square prism, triangular prism, hexagonal prism, octagonal prism, square pyramid, triangular pyramid, hexagonal pyramid, octagonal pyramid, cone, conoid, hemisphere.

2. **SURFACES**—Square, oblong, rhombus, rhomboid, triangle, isosceles triangle, equilateral triangle, scalene triangle, pentagon, hexagon, octagon, circle, semicircle.

3. **LINES**—
 (a) Shape of lines—Straight, crooked, curved.
 (b) Position of lines—Horizontal, vertical, oblique, perpendicular, diameter, diagonal, radius.

4. **ANGLES**—Right angle, acute angle, obtuse angle.

5. **DISTANCE**—Inch, foot, yard, mile; objectively fix the limiting points of the mile on a street.

DIRECTION—North, east, west, south, north-east, north-west, south-east, south-west.

TEMPERANCE AND HYGIENE.

Conversations on eating, drinking, care of teeth, bathing, sleep, clothing, control of temper, effects of alcohol and tobacco on the system, respiration and pure air, impure air, necessity for pure air, and bad effect of impure air when inhaled; where pure air is found, and how let into rooms; how impure air is forced out of rooms; proper temperature of sitting and sleeping rooms.

MUSIC.

1. Review II. Grade course.

2. Modulator drill, the second and the fourth of the tonic, ear tests of seconds, thirds, fourths, fifths and octaves.

3. How to write pulse-and-half, three-quarter and quarter-pulse time divisions.

4. From selections of poetry in the Reader have pupils point out the strong and the weak syllables in illustration of the strong and the weak, or the accented and the unaccented parts of measures.

DRILL AND CALISTHENICS.

1. Review III. Grade.

2. Teach breathing exercises; exercises to strengthen the limbs.

GRADE IV.

READING

1. Second Reader, from page 102 to end
2. Complete mastery of phonics.
3. To read intelligibly and with expression, Second Reader from page 102 to the end.
4. Conversational reading of lessons XXXVI, XLIV. and XLV., omitting all that is not included in the conversational parts of the lessons.

SPELLING.

1. Oral spelling of words in reading lessons; days, months, seasons, technical terms in arithmetic to end of division, terms in geography course.
2. Written spelling of phrases, sentences, and all words and terms mentioned under oral spelling.

LITERATURE.

1. Meaning of words and phrases.
2. To be able to give the homonyms corresponding to those in the reading lessons, and their meanings.
3. $\left\{ \begin{array}{l} (a) \text{ To be able to point out the beginning and ending of the paragraphs in the lessons.} \\ (b) \text{ To be able to give the topics of the paragraphs.} \end{array} \right.$
4. To be able to give the names of all the punctuation marks in the lessons.
5. To know the use of the period, interrogation mark, exclamation mark, hyphen, apostrophe, quotation marks, and the accents.

COMPOSITION.

1. ORAL— $\left\{ \begin{array}{l} (a) \text{ To be able to express in a series of complete sentences ideas of familiar actions, objects and pictures, ideas developed from form study, geographical study, temperance and hygiene study.} \\ (b) \text{ To be able to change affirmations to negations or interrogations, and vice versa.} \end{array} \right.$

2 WRITTEN—

- (a) Capitalization—Use of capital at beginning of sentence and special names.
- (b) Punctuation—Period and interrogation at end of sentence. Period after subject of composition, Roman numerals, initial letters, and abbreviations.
- (c) To copy elliptical sentences from blackboard, and to be able to write a composition of 50 words after the topics of a lesson on actions, objects, pictures, form study, geographical study, temperance and hygiene study, etc., have been developed, and arranged in order and expressed orally.
- (d) To change affirmations to negations or interrogations, and *vice versa*.

NATURE STUDY AND GEOGRAPHY.

1. Review III. Grade course.

2. TEACH—Def. peninsula, isthmus, beach, cape, promontory, bay, strait, lake, tributary, confluence, summit of hill, base of hill, continent, and ocean.

3. TEACH—Rice, sago, tapioca, corn starch, coconut, pineapple, cocoa, chocolate, coffee, tea, sugar, salt, pepper and catsup.

4. OBSERVATION—Moisture, evaporation, condensation, cloud, mist, fog, rain, dew, ice, snow, hail.

Soils (sandy, loam, gravel clay), composition of soils (i. e.) whether mineral or decayed matter, or mixture of both.

Soils (fertile and barren).

Direction of winds.

5. Outline map of Middlesex, showing London, Strathroy, Glencoe, Parkhill, Lucan, Thames, railroads and railway stations. Extend railway out of County, and show St. Thomas, Port Stanley, St. Marys, Stratford, Ingersoll, and Woodstock.

6. The population of London, Ontario, Dominion of Canada.

7. Names and positions of the oceans and the continents.

ARITHMETIC.

1. Review III. Grade course.

2. TEACH—
- (a) Short division, division by two and by three factors.
 - (b) Division in the sense of being "contained in," and in the sense of "distribution."
 - (c) Long division, with a divisor of three places and a dividend of seven places.

3. Rapid mental solutions of problems involving division in the sense of "contained in" and "distribution."

4. Easy problems, containing only two conditions, in written arithmetic.

5. THEORY —
- (a) To point out, use correctly and spell concrete number, abstract number, even number, odd number, addend, column, sum, minuend, subtrahend, difference, remainder, multiplicand, multiplier, product, factor, notation, numeration, Arabic notation, Roman notation.
 - (b) To know the name and use correctly the symbols $+$, $-$, \times , \div , $=$, 0 , c .

WRITING.

1. ORAL—Analysis and synthesis of the small and the capital letters and figures.

2. POSITION —
- (a) Position of body while writing.
 - (b) Distance of eyes from copy-book while writing.
 - (c) Position of feet and left hand while writing.
 - (d) Position of copy book on desk while writing.
 - (e) Position of pen while writing.

3. MOVEMENT—Proper movement of fingers, hand, wrist and arm while writing.

4. WRITTEN —
- (a) To be able to express on slates, blackboard or paper the elements and principles used in writing.
 - (b) To be able to write legibly with pen and ink all of No. 2 Copy-book.

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc.

Paint in flat tones with pencil, ink or color, or make outline drawings.

Window Sketches—Sketches from animals, birds, etc., outdoor study if convenient.

Figure drawing from the pose.

Compose studies.

2. Study of type solids, cube, sphere, cylinder, etc., outline drawings and sketches of objects based on them.

Grouping of familiar objects.

3. Illustrative and memory work in connection with other lessons.

4. Picture study.

5. Study of flat forms.

Line drill to secure proper pencil holding and free arm movements.

6. Design of borders, surface patterns, etc., for some definite purpose using brush strokes, geometric units and motives from nature (not pictorial).

Accurate measurements and division of spaces.

Designs of simple articles as bowl, mug, door, etc.

7. Mechanical drawing of common straight lines objects to half and quarter scales.

Construction from stiff paper or cardboard of calendar, frame, booklet, envelope case, table, chair, wheelbarrow, etc.

FORM STUDY.

SOLIDS—Cube, sphere, cylinder, square prism, triangular prism, hexagonal prism, octagonal prism, square pyramid, triangular pyramid, hexagonal pyramid, octagonal pyramid, cone, conoid, oblate spheroid, prolate spheroid, hemisphere, parallelopiped, square plinth, circular plinth.

TEMPERANCE AND HYGIENE.

Conversations on foods, cooking of foods, over-cooking of foods, mastication of foods, drinking, care of teeth, care of hair, care of nails, bathing, sleep, clothing, control of temper, effects of alcohol and tobacco on the system, respiration, pure air, impure air, necessity for pure air and bad effect of impure air when inhaled, where pure air is found and how let into rooms, how impure air is forced out of rooms, proper temperature of sitting and sleeping rooms.

MUSIC.

1. Review the II. and III. Grade courses.
2. Pupils must be able to sing individually, as well as in groups or as a class.

DRILL AND CALISTHENICS.

1. Review III. and IV. Grade courses.
2. Military drill, position of the soldier, standing at ease, right and left hand salutes.

GRADE V.

READING.

1. Third Reader to page 140.
2. To be able to read intelligibly and with expression, Third Reader from beginning to page 140.
3. $\left\{ \begin{array}{l} (a) \text{ To know the powers of the vowels and the diphthongs.} \\ (b) \text{ To know the voice consonants and the voiceless consonants,} \\ \text{and how they are uttered.} \\ (c) \text{ To know the elements required to form a syllable. [See} \\ \text{page XV., "Concise Imperial Dictionary."]} \end{array} \right.$

SPELLING.

1. Oral spelling of words in reading lessons, including homonyms of such words, days of week, months of year, seasons, technical terms in arithmetic to the end of Junior III. course, terms in geography course, grammar course, and form-study course.
2. Written spelling of phrases, and sentences of reading lessons, and all words and terms mentioned under oral spelling.

LITERATURE.

1. To be able to give the meanings of the words and the phrases, and explain secondary derivations.
2. To be able to give important synonyms and synonymous phrases.
3. To be able to give homonyms corresponding to those in the reading lessons, and their meanings.
4. To be able to recognize the leading thought in a sentence, and tell how it is modified by words, phrases and clauses, or by transposing certain words to a different part of the sentence.
5. To be able to give the topics of the paragraphs and show their relation to the subject of the lesson.
6. To know the use of italics.
7. To know the use of the period, comma, interrogation mark, exclamation mark, parenthesis, hyphen, apostrophe, the single and the double quotation marks, and the accents.

GRAMMAR.

1. The sentence.
2. The two great functional parts of the sentence, viz. :—(a) subject ; (b) predicate.

3. { (a) Complete subject ; complete predicate.
 (b) Grammatical subject ; grammatical predicate.
 (c) The distinction between the grammatical subject and the real subject. The distinction between the grammatical predicate and the real predicate.

4. The essential and the unessential parts of the complete subject and of the complete predicate.

5. The functional elements of the complete subject and of the complete predicate : 1, substantives ; 2, assertives ; 3, connectives ; 4, attributives ; 5, modifiers of attributives.

6. The structural elements of the functional elements, viz. :—(a) words (b) groups of words.

NOTE.—Give a great deal of practice in the six sections before beginning the seventh.

7. The parts of speech.

8. Groups of words into (a) phrases, (b) clauses.

NOTE.—The structural elements of a sentence are (a) words, (b) phrases, (c) clauses.

NOTE.—A phrase is a group of words that does not contain a subject and a predicate and is used as a part of speech. A clause is a group of words that contains a subject and a predicate and is used as a part of speech.

9. { (a) The simple sentence.
 (b) The complex sentence.

NOTE.—A complex sentence is a simple sentence that contains one or more clauses as structural elements.

10. { (a) Analysis of easy simple sentences that contain not more than twelve words.
 (b) Analysis of easy complex sentences that contain not more than three clauses and not more than six words in any clause.

NOTE.—Pupils must be able to classify sentences into simple and complex.

11. To change adjectives to adjective phrases and to adjective clauses, and *vice versa*.

12. To express certain words as different parts of speech.

COMPOSITION.

- (a) To be able to express in a series of complete sentences ideas of familiar objects, and ideas developed from form study, geography study, and temperance and hygiene study.
- (b) To be able to change affirmations to negations or interrogations, and *vice versa*. To be able to change words to phrases, phrases to clauses, and *vice versa*.
- (c) To make an analysis of lessons III., VI., XII., XVIII., and XXXII., Third Reader, and show the introduction, the topic of each paragraph, the matter of each paragraph and the relation of each topic to the main subject, then to construct the topics and matter into a continuous narrative.
- (d) I.—To be able to take similar subjects and develop them into topics. II.—To develop or amplify each topic. III.—To construct all into a continuous narrative.
- (e) To be able to explain how to address and stamp an envelope; how to head; how to write the complimentary address; how to write the salutation; how to write the body of the letter (beginning paragraphs, order of paragraphs, margin, etc.); how to write the complimentary close; how to write the signature, etc. of a letter to a friend.
- (a) Capitalization—Use of capital at beginning of sentence and special names.
- (b) Punctuation—Period and interrogation at end of sentence. Period after subject of composition, Roman numerals, initial letters, and abbreviations.
- (c) To be able to address an envelope and write a letter to a friend.
- (d) To be able to write a composition of at least 100 words on the lessons mentioned in Section "c," oral composition, and be able to write a composition of 75 words on similar subjects and the topics set forth in Sections (a) and (b), oral composition.

1. ORAL.—

2. WRITTEN.—

GEOGRAPHY.

1. REVIEW—Def. island, pond, hill, valley, river, creek, right and left bank, mouth, source, current, rapid, cascade, cataract, peninsula, isthmus, beach, cape, promontory, bay, strait, lake, tributary, confluence, summit of hill, base of hill, continent, and ocean.

2. TRACH—Coast, seaboard, plain, table-land, mountain, mountain range, mountain chain, sea, gulf, channel, sound, basin of river, water-parting or watershed, axis, poles, equator, great circle, small circle.

3. Observation and talks on moisture, heat in producing evaporation, loss of heat producing condensation, cloud, mist, fog, rain, snow, hail, ice.

Soils (sandy loam, gravel, clay).

Soils (barren, fertile). Grains and vegetables grown on different kinds of soil; kinds of trees and shrubs in vicinity; heated air compared with cold air, as to weight when it is free; cold air confined in a sealed vessel, compared as to weight of same when heated; force that moves a toboggan down a slide, a metal or a stone to the bottom of a pond, causes balloon to ascend, the air to move, rain, hail and snow to fall, winds; heavier, as applied to gold when compared with iron as to weight; sea water to fresh water; raw material and manufactured products to be brought into room when possible; special study of plants.

4. Relative positions of the continents, oceans, great seas, East Indies, West Indies, British Isles, Iceland, Greenland, Sandwich Islands, Australia, New Zealand.

5. NORTH AMERICA—Boundary, countries, capitals, Rocky Mountains, Alleghany Mountains, Mackenzie River, St. Lawrence River, Mississippi River, Saskatchewan and Nelson Rivers. Lessons XX. to XXXI. inclusive, Public School Geography; Hudson's Bay, Gulf of St. Lawrence, Gulf of Mexico; peninsulas of Nova Scotia, Florida, Yucatan and California; islands of Newfoundland and Vancouver.

6. CANADA—Boundary, provinces, capitals, transcontinental railway, Ottawa River, two or three of the chief products of each province.

7. To be able to draw an outline of North America and Canada.

8. Co-operative, progressive, production maps of North America and Canada.

9. To draw an outline map of Canada, showing provinces, capital, great railways and canals, fishing, agricultural, lumbering, coal, salt, nickel, iron, gold, silver, copper and gypsum districts.

ARITHMETIC.

- | | |
|--------------|---|
| 1. MENTAL — | <ul style="list-style-type: none"> (a) The tables of weights and measures, and the purposes for which they are used. (b) Reduction descending, reduction ascending, compound rules, omitting fractional part in linear and square measure. (c) Easy problems in simple rules, reduction and compound rules. (d) To be able to spell and use correctly and readily all the technical terms to the end of Junior III. course. |
| 2. WRITTEN — | <ul style="list-style-type: none"> (a) Review notation, numeration and simple rules. (b) To be able to write out all tables of weights and measures. (c) To be able to solve and write out the solutions in a neat and correct form, reduction descending, reduction ascending, compound rules, bills and accounts; simple problems which contain no more than two conditions. (d) To be able to use correctly all signs, technical terms and symbols to the end of Junior III. course. |

WRITING.

The same as Senior II., except to substitute No. 3 for No. 2 Copy-book.

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc., paint in flat tones with pencil, ink or color, or render in expressive outline.

Window sketches.

Sketches from animals, birds, etc., outdoor study if convenient.

Simple landscapes.

Figure drawing from the pose.

Compose studies.

2. Study of type solids and objects based on them.

Sketches of familiar objects singly and in groups.

Render in expressive outline or in two or three flat tones in scale relation or to represent color values.

3. Illustrative and memory drawing in connection with other studies.

4. Line Drill—Special attention to margins.

5. Study of historic ornament, Egyptian and Greek.

6. Design of borders and surface patterns for some definite purpose, using brush strokes, geometric units and motives from nature (not pictorial).

Accurate measurements and division of spaces.

Design of simple articles of furniture, dishes, etc.

Geometric views or working drawings of type solids, simple objects, articles of furniture, etc.

Pattern making of type models, etc.

FORM STUDY.

SOLIDS—Review IV. Grade course.

TEMPERANCE AND HYGIENE.

1. Review Senior II. course.

2. Teach an outline of Chapter I. and II., Text-book of Temperance and Hygiene.

MUSIC.

1. The staff; G cleff; bars single and double; ledger lines; measures and their sub-divisions.
2. The position of the letters on the staff.
3. The structure of the Major Diatonic scale, a tone, an interval.
4. The whole, half, quarter and eighth notes and the corresponding rests.
5. The twofold meaning of the notes.
6. The use of the essential sharps and flats; the accidental sharp and flat; the natural.
7. The rapid application of the Solfa syllables to the notes of music written in the following keys: C, E, E Flat, G and B Flat.

NOTE.—The tonic, mediant, dominant and the leading note are on the lines in the keys mentioned, and the other notes are in the spaces. Below the tonic and above the octave of the tonic the reverse is the case. The solfa syllables for E and E Flat are on the same degrees of the staff. A pupil that can solfa the one can solfa the other.

8. The pause, slur, tie and a dot after a note; where the accents occur and why used.
9. The time signatures for double, triple and quadruple time, with whole, half, and quarter notes taken as a unit of time measurement.
10. To be able to sing in the key of C, E, E Flat, G and B Flat, composed of whole, half, quarter or eighth notes.

DRILL AND CALISTHENICS.

1. Class-room drill and calisthenics.
2. MILITARY DRILL.—Position of the soldier, standing at ease, standing easy, balance step, marking time, side or closing step, taking open order, right, left about and half turns, forming fours, salutes, marching, extension motions.

GRADE VI.

READING

1. Third Reader, from page 140 to end.
2. To be able to give due emphasis to the emphatic words and phrases, and explain the change of meaning conveyed by a change of emphasis. To read with good expression, Third Reader, from page 140 to the end.
 - (a) To know the powers of the vowels and the diphthongs.
 - (b) To know the voice consonants and the voiceless consonants, and how they are uttered.
 - (c) To know the elements required to form a syllable. [See page XV., "Concise Imperial Dictionary."]
 - (d) Pronunciation, with aid of the Dictionary.

SPELLING.

1. Oral spelling of words in reading lessons, including homonyms of such words : days of week, months of year, seasons, technical terms in arithmetic, grammar, drawing, form study, and geography course.
2. Written spelling of phrases, sentences and words in reading lessons, and all words and terms mentioned under oral spelling.

LITERATURE.

1. To be able to give the meanings of the words and the phrases, and explain secondary derivatives.
2. To be able to give the important synonyms and synonymous phrases.
3. To be able to give the homonyms corresponding to those in the reading lessons, and their meanings.
4. To be able to recognize the leading thought in a sentence, and tell how it is modified by words, phrases and clauses, or by transposing certain words to a different part of the sentence.
5. To be able to give the topics of the paragraphs and show the unity of meaning of the paragraphs through their relation to the main subject.
6. To be able to point out typical examples of the simile, metaphor and ellipse.
7. To be able to point out emphatic words and phrases.
8. To know the use of italics.
9. To know the use of the period, comma, interrogation mark, exclamation mark, parenthesis, hyphen, apostrophe, the single and the double quotation marks, and the accents.

GRAMMAR.

1. Review Grade V.
2. Teach the meaning of cross-division and the basis of the logical division and the classification of the parts of speech.

- (a) NOUNS—
 { (1) Abstract and concrete.
 (2) Common and proper.
 (3) Simple and compound.
 (4) Primitive and derivative.
 (5) Collective and non-collective.
- (b) PRONOUNS—
 { (1) Personal.
 (2) Demonstrative.
 (3) Relative or conjunctive. [Better to teach
 as a double part of speech than as a
 class of pronoun.]
 (4) Interrogative.
 (5) Indefinite.
- (c) ADJECTIVES—
 { (A) (1) Proper.
 (2) Descriptive.
 (3) Quantitative.
 (4) Numeral.
 (5) Demonstrative.
 (6) Distributive.
 (B) (1) Attributive.
 (2) Predicative.
- (d) VERBS—
 { (1) (a) Pure or symbolic.
 (b) Impure or presentive.
 (A) Impure or presentive—(a) Active.
 (b) Inactive.
 (B) Active—(a) Transitive.
 (b) Intransitive.
 (2) (a) Complete predication.
 (b) Incomplete predication.

NOTE.—Teach the distinction between grammatical object and real object.

- (e) ADVERBS—
 { (1) Simple.
 (2) Interrogative.
 (3) Relative or conjunctive. [Better to teach
 as a double part of speech than as a
 class of adverb.]
- SIMPLE ADVERBS—
 { (A) (1) Time.
 (2) Place.
 (3) Number.
 (4) Manner, quality or state.
 (5) Quantity, extent or degree.
 (6) Affirmation or denial.
 (B) (1) Attributive.
 (2) Predicative.
- INTERROGATIVE ADVERBS—
 { (1) Time.
 (2) Place.
 (3) Number.
 (4) Manner, quality or state.
 (5) Quantity or degree.
 (6) Cause or reason.

(f) CONJUNCTIONS— (1) Co-ordinative.
(2) Subordinative.

3. Teach as double parts of speech—(a) Relative or conjunctive pronoun.
(b) Relative or conjunctive adverb.
4. Teach compound, and complex-compound sentences.
5. Pupils must be able to classify sentences into simple, complex, compound, and complex-compound.

COMPOSITION.

- (a) To be able to change words to phrases, phrases to clauses, and *vice versa*.
- (b) To be able to combine three simple sentences into a complex or a compound sentence.
- (c) To be able to change easy examples of direct narrative to the indirect form, and *vice versa*.
- (d) To be able to write a receipt for money, a promissory note without and with interest.
- (e) To be able to write in continuous narrative a III. Book lesson, after it has been studied, or a short story read or told.
- (f) To be able to write a composition of twenty-five lines on a historical or geographical subject in the course.
- (g) To be able to develop a simple theme into three or four topics, write a paragraph on each topic making a composition of at least twenty lines.
- (h) To be able to write and address readily a letter to a friend.
- (i) I. CAPITALIZATION—To be able to use the capital letters correctly.
- II. PUNCTUATION—To be able to use the period, comma, exclamation mark, interrogation mark, quotation mark, dash, parenthesis, caret and apostrophe.

GEOGRAPHY.

1. Review V. Grade course.
2. TEACH—Def. volcano, desert, oasis, delta, harbor, birth, estuary, lagoon, parallels of latitude, meridians, latitude, longitude, first meridian, tropic, tropic of Cancer, tropic of Capricorn, Arctic Circle, Antarctic Circle, zones, latitude, altitude, ocean currents and winds, as affecting climate; heat conduction and radiation as outlined in lesson LXXII.; thermometer, lesson LXXVII.; trees, lesson LXXVI.; roots, lesson LXXX.; leaves, lessons LXXXII and LXXXIV.; the flower, lesson LXXXVIII.; fruit, lesson XC., Third Reader.

3. How to read and interpret a map.

- (a) To draw an outline map of Ontario, showing counties and county towns, chief cities, important trunk lines of railroads, and canals, and the timber, iron, copper, silver, nickel, salt and petroleum districts.
- (b) To draw an outline map of Canada, showing provinces, capital, great railways and canals, fishing, agricultural, lumbering, coal, iron, gold, silver, nickel, copper and gypsum districts.
- (c) To draw an outline map of United States, showing chief border States with their capitals, and to mark the rice, tobacco, cotton, sugar, coal, gold, silver, iron, wheat, corn and timber districts.

5. Counties and county towns of Ontario, and the railways and canals, together with the mining, lumbering and agricultural districts; the foreign markets, the great exports and imports of the province.

6. { (a) States and capitals of United States.
(b) The great commercial cities.

7. General outline of geography of Canada, its provinces; United States, Mexico, Central America and Newfoundland, as given in Public School Geography.

8. For observation and talks, raw material and manufactured products to be brought into class-room. Talks on birds, animals, trees, plants and flowers, examined and studied in room.

9. Co-operative, progressive, production maps of Canada, Ontario, and United States.

CANADIAN HISTORY.

Teach the following topics :

1. The Indian Tribes of Canada.
2. Discovery and exploration—Columbus, The Cabots, Cartier
3. Champlain and his work.
4. The One Hundred Associates, The Jesuit Mission.
5. Quebec in Canadian History. Kirke.
6. Indian Wars. Dulac.
7. Royal Government established. Laval, Talon.
8. Hudson Bay Company.
9. Exploration of the Mississippi. Marquette, Joliet, La Salle.
10. Colonial Wars. Treaty of Ryswick. Frontenac.
11. Treaty of Utrecht.
12. Boundary lines war. Braddock.
13. Seven Years' War. Montcalm, Wolfe
14. Treaty of Paris.
15. Canada under military rule.
16. Pontiac's conspiracy.
17. The Quebec Act.
18. American Revolution. United Empire Loyalists.
19. The Constitutional Act. Carleton.
20. War of 1812-14. Brock, Tecumseh, Laura Secord, Simcoe.

ARITHMETIC.

1. ORAL—Review simple rules, tables of weights and measures, reduction, compound rules, notation and numeration, as laid down and limited in preceding courses.

TEACH—
 (a) Def. of technical terms to end of V. Grade course.
 (b) The basis of classification, cross-division, the principle of division in separating numbers into concrete and abstract; even and odd; prime and composite; notation into Roman and Arabic; rules into simple and compound; reduction into ascending and descending.
 (c) Aggregates, averages, sharing, measurements, [linear, area, volume].
 (d) Easy problems in the course.

3. WRITTEN—
 (a) To be able to write out the definitions and the tables of weights and measures.
 (b) To be able to write out with the correct use of the various symbols and signs, the solutions of simple problems in the course, including bills and accounts.

WRITING.

1. The same as IV. Grade course, except to substitute No. 4 for No. 2 Copy-book.
2. Exercises in development of rapidity, with proper movement.

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc. Paint in flat tones with pencil, ink or color, or render in expressive outline.

Window sketches.

Sketches from animals, birds, etc.

Outdoor study if convenient.

Simple landscapes.

Figure drawing from the pose.

Compose studies.

2. Study of type solids and objects based on them.

Sketches of familiar objects singly and in groups.

Render in expressive outline or in two or three flat tones in scale relation or to express color values.

Special attention to books in different positions.

Care in the drawing of ellipses.

Use pencil measurements for proportion and compare all slanting lines with a vertical or horizontal line.

3. Picture study.
4. Illustrative and memory drawing in connection with other studies.
5. Line Drill—Special attention to margins.
6. Compare Egyptian, Greek and Roman ornament.
7. Design of borders and surface patterns for some definite purpose, using brush strokes, geometric units and motives from nature (not pictorial).

Accurate measurements and division of spaces.

Design of simple articles of furniture, etc.

Geometric views or working drawings of type solids, sections of mouldings, simple objects, furniture, etc.

Pattern making of type models, etc.

Plans of rooms.

PHYSIOLOGY AND HYGIENE.

1. **REVIEW**—IV. Grade course and an outline of Chapters I. and II. of *Text-book on Physiology and Hygiene*.
2. **TEACH**—An outline of Chapters III. and IV. of the *Text-book on Temperance and Hygiene*.

MUSIC.

1. Review Grade V. course.
2. What constitutes a second, third, fourth, fifth, sixth, seventh and an octave.
3. The meaning of Unison, Melody, Chord, Discord and Harmony.
4. The meaning of two-part singing.
5. The rapid application of the solfa syllables to the notes of music written in the following keys: D, F, A, and A Flat.

NOTE.—The tonic, mediant, dominant and the leading note are in the spaces in the keys mentioned. The other notes are on the lines. Below the tonic and above the octave of the tonic the reverse is the case. The solfa syllables for A and A Flat are on the same degrees of the staff. A pupil that can solfa the one can solfa the other.

6. To be able to sing two-part songs in all the keys prescribed for Grades V. and VI.

DRILL AND CALISTHENICS.

1. Class-room drill and calisthenics.
2. **MILITARY DRILL**—Position of the soldier; standing at ease; standing easy; balance step; marking time; side or closing step; taking open order; right, left, about, and half turns; forming fours; salutes; marching; extenuation motions.

GRADE VII.

READING.

1. Fourth Reader to page 141.

- (a) To practice special exercises for articulation, inflection, tone and emphasis.
 - (b) To be able to give proper emphasis to the emphatic words and phrases, and to explain the change of meaning conveyed by a change of emphasis.
 - (c) To be able to modulate the voice when reading so as to express with the leading thoughts their concomitant emotions.
 - (d) To be able to read with good expression from the beginning to page 141, Fourth Reader.
- (a) To know the powers of the vowels and the diphthongs.
 - (b) To know the voice consonants and the voiceless consonants, and how they are uttered.
 - (c) To know the elements required to form a syllable. [See page XV., "Concise Imperial Dictionary."]
 - (d) Pronunciation with aid of the Dictionary.

SPELLING.

1. Oral spelling of words in reading lessons, technical terms in arithmetic, grammar, drawing, form study, history, temperance and hygiene, and geography course.

2. Written spelling of phrases, sentences and words in reading lessons; and all words and terms mentioned under oral spelling.

LITERATURE.

- (a) The general literature of all lessons to page 141.
 - (b) A special study of eight lessons and the memorization of six short extracts to be selected from the course by the Inspector of the school.
2. To be able to give the meanings of the words and the phrases and to explain the secondary derivatives.
 3. To be able to give the important synonyms and synonymous phrases.
 4. To be able to give the homonyms corresponding to those in the reading lessons, and their meanings.
 5. To be able to recognize the leading thought in a sentence, and tell how it is modified by words, phrases and clauses, or by transposing certain words to a different part of the sentence.
 - (a) To be able to select the topical sentence of the paragraph, and give the topic.
 - (b) To show that each sentence in a paragraph is related to the topic, and that each topic is related to the main subject.

7. To be able to point out typical examples of the simile, metaphor, ellipsis, tautology, epizeuxis, erotesis or interrogation, imitative harmony, irony, personification and allusion.

8. To be able to point out emphatic words and phrases.

9. To be able to point out passages expressive of strong emotion and to tell what emotions would be cultivated by reading and studying the selections of poetry.

10. Graphic representation, illustration or picture paraphrasing of scenes, actions, etc., suggested by the literature lessons.

GRAMMAR

1. Review Grades V. and VI.

2. Teach the inflection of the noun, pronoun, verb, adjective and adverb.

NOUN

- | | |
|--------------|--|
| | 1 Methods of forming plurals |
| | 2 Nouns that have the same form for both numbers |
| | 3 Nouns that have two forms in the plural, each form with a separate meaning of its own. |
| (a) NUMBER - | 4 Nouns that have one meaning in the singular and another in the plural. |
| | 5 Nouns that have two meanings in the plural against one in the singular. |
| | 6 Nouns that have two meanings in the singular against one in the plural. |
| (b) GENDER - | 1 By change of word |
| | 2 By prefixing or adding a word |
| | 3 By change of termination or inflection |
| | 1 Subjective nominative. |
| | 2 Predicate nominative |
| | 3 Nominative in apposition |
| | 4 Nominative of address |
| (c) CASE - | 5 Nominative absolute. |
| | 6 Possessive before a nominative or objective |
| | 7 Possessive in apposition |
| | 8 Objective after a part of speech that has a transitive meaning or after a preposition. |
| | 9 Objective in apposition |
| | 10 Adverbial objective |

NOTE.—Distinguish grammatical object, real object, and objective case.

VERB

- | | |
|-------------------|--|
| (a) CONJUGATION - | 1 Old or strong |
| | 2 New or weak. |
| (b) VOICE | 1 Active voice |
| | 2 Passive voice. |
| | 3 Structure of passive voice. |
| | 4 Distinction in meaning between the active and the passive voice. |

(c) MOOD—	{	1 Indicative.
		2 Subjunctive.
		3 Imperative.
(d) TENSE—	{	1 Present.
		2 Past.
		3 Future.

NOTE.—There are four forms of the three tenses, viz. :—1, indefinite ; 2, continuous, or progressive ; 3, perfect ; 4, perfect continuous or progressive.

(e) NUMBER—	{	1 Singular.
		2 Plural.
(f) PERSON—	{	1 First.
		2 Second.
		3 Third.

PRONOUN.

- (i) PERSON.
- (j) NUMBER
- (k) GENDER.
- (l) CASE.

ADJECTIVE.

(a) COMPARISON—	{	1 Positive degree.
		2 Comparative degree.
		3 Superlative degree.

NOTE.—Methods of comparison :—(a) terminational ; (b) by different words ; (c) by prefixing words, as more and most.

- (b) NUMBER OF CERTAIN ADJECTIVES.

ADVERB.

- (a) COMPARISON—The same as the adjective.

3. Teach the complete parsing of all the parts of speech.
4. Teach how to detect and correct errors as follows :

NOUNS	{	1 Number.
		2 Gender.
		3 Possessive case.

VERBS	{	1 Number and person
		2 Past tense used instead of a perfect participle.
		3 Perfect participle used instead of a past tense.
		4 Past tense used instead of perfect participle after have.

PRONOUN

- 1 Person.
- 2 Number.
- 3 Gender.
- 4 Case.
- 5 The order of pronouns or pronouns with nouns, when the pronouns are of different persons.

COMPOSITION.

1. Graphic illustrations of actions, scenes, etc. ; and the paraphrasing of poetical literature lessons.
2. Changing sentences in active voice to passive voice ; direct narration to indirect, words to phrases, phrases or words to clauses, and *vice versa*.
3. Receipts for money ; promissory note with and without interest, letter to a friend ; short business letters.
4. To write a composition on a topic or topics in history, geography or physiology and hygiene course ; to develop a simple subject into at least three topics, and write a composition of three paragraphs total not less than 100 words.
5. Reproduction of short stories after hearing them told or read.

GEOGRAPHY.

1. Review VI. Grade course.
2. Teach what a degree is, the number of degrees in a circle, number of minutes in a degree ; where there is no latitude and no longitude ; the greatest number of degrees of latitude and longitude ; when the days are longest in the northern hemisphere, when shortest, when the same length over the globe, and why. The seasons. Names, position and definition of the tropics and the polar circles. Names and boundaries of the zones, orbit of earth, shape, direction of earth around sun, direction of daily motion, etc.
3. (a) Observation and examination of plants, shrubs, grain, fruit, raw material and manufactured goods.
(b) Talks on birds, animals, etc.
4. Co-operative, progressive, production, maps of Canada, North America, and Europe.
5. ATLANTIC OCEAN—Currents : kinds, causes, and use. Winds : kinds, causes, and use.
6. CLIMATE, as effected by ocean currents, distance from ocean, winds, latitude, elevation, variation of solar heat at different periods of the year ; length of day and night in north, etc.
7. EUROPE—Boundary, mountains, slopes, rivers, islands, groups of islands, capes, gulfs, bays, channels, straits, seas, peninsulas ; countries and their capitals and situations ; relative size and population of the countries ; chief industries of the people ; exports, imports, seaports, religion, government, chief manufacturing cities of Great Britain and Ireland, and articles manufactured, modes of travel and routes from country to country to carry on commerce.

HISTORY.

1. Review Grade VI. course.
2. Teach the following topics :
 1. The Canadian rebellion - McKenzie, Papineau.
 2. Lord Durham's report.
 3. Act of Union—Sydenham.
 4. The Ashburton Treaty.
 5. Public School System—Dr. Ryerson.
 6. Lord Elgin's work.
 7. Rebellion Losses Bill.
 8. Municipal Loan Act.
 9. Reciprocity Treaty.
 10. Seigniorial Tenure Act.
 11. Clergy Reserves Act.
 12. Fenian Raids.
 13. British North America Act—Geo. Brown.
 14. Red River Rebellion, 1869—Wolseley.
 15. New Provinces.
 16. Washington Treaty.
 17. Railways and canals.
 18. The Ballot Act.
 19. The Halifax Commission.
 20. The National Policy—Protective Tariffs.
 21. The Redistribution Bill.
 22. Dominion Franchise Act.
 23. The Canadian Pacific Railway.
 24. Sir John Macdonald. Hon. Alex. McKenzie.
 25. Temperance Acts—The Crooks' Act—The Scott Act.
 26. Canada in the South African war.
 27. Family Compact—Responsible Government.
 28. How Canada is governed.
 29. Civil officials, their appointment and duties.
 30. Terms :—Plebiscite, Coalition, Government by the People, Etc., Etc.

ARITHMETIC.

- (a) Review preceding courses.
 (b) Teach *def* factors, measures, multiples and vulgar fractions.
 (c) Teach the principle of division in separating factors into prime and composite; numbers into prime and composite; fractions into vulgar and decimal; vulgar fractions into simple, complex and compound; proper and improper. Teach that there is cross-division in separating fractions into proper, improper, simple, complex and compound.
1. ORAL—

2. WRITTEN—To be able to write out with proper use of signs, symbols and technical terms, in neat, logical order, reduction, compound rules, bills and accounts, measurements, measures, multiples, vulgar fractions and problems involving them.

WRITING.

1. The same as IV. Grade, except to substitute No. 5 for No. 2 Copy-book.
 2. Exercises in development of rapidity with proper movement.

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc. Paint in flat tones with pencil or color, render in expressive pencil outline, or make careful pencil studies.

Window Sketches—Roof studies with chimneys and towns.

Sketches from animals, birds, etc., outdoor study if convenient.

Simple landscapes.

Figure drawing from the pose.

Compose studies.

2. Study of type solids.

Sketches of familiar objects singly and in groups.

Make careful pencil sketches, paying particular attention to perspective and to light and shade.

Render in expressive outline, or in two or three flat tones, in scale relation or to express color values.

Special attention to books in different positions.

Groups of objects that tell a story, such as would suggest a journey, a picnic, etc.

Care in the drawing of ellipses.

Use pencil measurements for proportion and compare all slanting lines with a vertical or horizontal.

Pupils led to discover by observation the laws underlying parallel perspective.¹

Practice in the use of a finder.

3. Picture studies and essays.
4. Illustrative and memory drawing in connection with other studies.
5. Line Drill—Special attention to margins.
6. Compare Egyptian, Greek and Roman ornament.
7. Design borders and surface patterns for some definite purpose, using geometric units, motives from nature (not pictorial) and ink blots.

Accurate measurements and division of spaces.

Design for grill work, inlaid wood, bent iron, etc.

Design of simple articles of furniture.

Geometric views or working drawings of type solids, sections of moldings, simple objects, furniture, etc.

Pattern making, type models, portfolios, etc.

Plans of rooms, houses, etc.

PHYSIOLOGY AND HYGIENE.

1. Review IV. Grade course and Chapters I., II., III. and IV. of Text-book Physiology and Hygiene.
2. Teach an outline of digestion and circulation as contained in Chapters V. and VI. of Text-book Physiology and Hygiene.

MUSIC.

1. Review the V. and the VI. Grade courses.
2. Transposition of a piece of music from any key to any other key of the following: C, G, D, A, E, F, B Flat, E Flat and A Flat.
3. Syncopation, staccato, half-staccato, and the repeat.

DRILL AND CALISTHENICS.

Same as VI. Grade course.

GRADE VIII.

READING.

1. Fourth Reader from page 141 to end.
2. Orthoepy and principles of elocution.
3. To be able to read with good expression any selection from the course.

SPELLING.

Spelling throughout Reader ; general spelling from Spelling-book ; technical terms in arithmetic, grammar, drawing, form, and geography ; geographical names.

LITERATURE.

1. (a) Special study of High School entrance literature lessons, as prescribed from time to time by Education Department.
2. (b) An outline study of the other lessons from page 141 to end of Reader.

GRAMMAR.

1. Review Grades V., VI., and VII
2. Teach which structural elements—(a) word, (b) phrase, and (c) clause—when used substantively, can be :
 - (a) The subject of a verb.
 - (b) The object of a part of speech that has a transitive meaning.
 - (c) The object of a preposition.
 - (d) The complement to a verb.
 - (e) In apposition to a noun
3. Teach which structural elements—(a) word, (b) phrase, and (c) clause—when used substantively, can be :
 - (a) Direct object.
 - (b) Indirect object.
 - (c) Retained object.
 - (d) Cognate object.
 - (e) Reflexive object.
 - (f) Complementary object.
4. Classify numeral adjectives into :
 - (a) Definite.
 - (b) Indefinite.
5. Classify definite numerals into :
 - (a) Cardinal.
 - (b) Ordinal

6. Classify co-ordinative conjunction into :

- (a) Cumulative.
- (b) Alternative.
- (c) Adversative.
- (d) Illative.

7. Classify subordinative conjunctions into :

- (a) Apposition.
- (b) Causation.
- (c) Effect.
- (d) Purpose.
- (e) Condition.
- (f) Concession or contrast.
- (g) Comparison.
- (h) Extent or manner.
- (i) Time.

8. Show that certain relative or conjunctive pronouns have two uses :

- (a) Restrictive.
- (b) Continuative.

9. Show that certain relative or conjunctive adverbs have two uses :

- (a) Restrictive.
- (b) Continuative.

10. Show that compound and complex-compound sentences are joined by :

- (a) Co-ordinative conjunctions.
- (b) Relative or conjunctive pronouns when used in a continuative sense.
- (c) Relative or conjunctive adverbs when used in a continuative sense.

11. Teach the *possible errors* that can be made with *each part of speech*.

12. Teach how to *detect* the possible errors that can be made with each part of speech.

13. Teach how to *correct* the errors that can be made with each part of speech.

COMPOSITION.

1.

{	<p>(a) Change active to passive voice ; direct narration to indirect narration ; words to phrases ; words and phrases to clauses, and <i>vice versa</i>.</p> <p>(b) Combine two, three or four simple sentences into complex or compound sentences.</p>
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2. Special attention to business forms, as receipts, notes, cheques, accounts, etc ; business letters, social letters, forms of application for a situation, etc.

- ORAL — { (a) Special exercise in developing a subject into topics
(b) Special exercises in developing the topic into a paragraph.
(c) Outlines to be placed on blackboard to teach unity and continuity of paragraph.

3. To be able to write a composition on a studied literature lesson, topic in history, geography, or physiology and hygiene course; to develop a simple subject into at least three topics, and write a composition of three paragraphs, total not less than 120 words.

GEOGRAPHY.

1. Review preceding courses.
2. Teach Asia, Africa, South America, and Australasia.
3. Teach the comparative geography of the continents and countries.

- I. LAND SURFACE— { (a) Highlands—mountain systems, their height, slope and direction, etc.
(b) Lowlands—deserts, prairies, rivers, valleys, etc.

- II. DRAINAGE— { (a) Rivers—national and international, speed, size, uses, commercial, etc.
(b) Lakes—national, international, formation, uses and commercial.

- III. CLIMATOLOGY— { (a) Continental climate, insular climate.
(b) Causes of climatic difference, latitude, elevation, direction and height of mountain ranges, winds, ocean currents, direct and oblique rays of sun; variation in length of time of sunshine per day in different months of years on different parallels.
(c) Latitude with slight variations, of wheat, oats, barley, peas, or apples, oranges, lemons, grapes, rice, tobacco, silk, cotton, coal, etc.; horses, cows, pigs, sheep, elephant, lion, bear, seal, mink, otter, salmon, herring, oysters, lobster, etc.

- IV. — { (a) Area of countries and continents.
(b) Population of countries and continents.
(c) Pursuits, habits and customs of people.

4. Teach the great agents that modify our earth.

(a) EXTERNAL—Water, chemical action of atmosphere, frost, ice, glaciers, man.

(b) INTERNAL—Earthquakes and volcanoes.

5. Teach the winds—their causes and uses; the formation of dew, rain, snow, hail, fogs, clouds, hoarfrost, etc.

6. Teach the area in which the following are abundantly obtained or produced: iron, tin, gold, silver, copper, lead, nickel, gypsum, salt, coal, mica, granite, petroleum, flax, cotton, sugar, tea, coffee, rice, tobacco, currants, raisins, wines, oranges, lemons, bananas, timber, silk, wood, hides, wheat, oats, barley, etc.

7. Teach the great manufacturing centers and the articles manufactured; the great exporting cities and importing cities, and the great commercial waterways and railways of the world.

BRITISH HISTORY.

EARLY PERIOD TO 1066.

1. Review the courses of Grades VI. and VII.
2. Teach the following topics:
 1. The Britons—Druidism.
 2. The Roman Invasion—Cæsar, Boadicea, Agricola.
 3. Changes effected by the Romans.
 4. The coming of the English—Arthur, Augustine.
 5. Anglo-Saxon Government—The Witan.
 6. The Heptarchy—Egypt.
 7. Alfred the Great—Egypt.
 8. The Danish Conquest.
 9. Godwin—Harold II.
 10. Introduction of Christianity.

FEUDAL ENGLAND—1066-1485.

1. The Norman Conquest—William I.—Battle of Hastings.
2. The Feudal System—Lanfranc.
3. Henry I's. Charter—Anselm.
4. Constitutions of Clarendon—Becket.
5. Trial by Jury.
6. The Great Charter—Langton.
7. The Barons' War—De Montford.
8. The English Parliament.
9. Conquest of Wales—Llewellyn.
10. War with Scotland—Wallace and Bruce.
11. Bannockburn.
12. 100 Years' War with France.

13. The Black Prince.
14. The Peasant's revolt—Wat Tyler.
15. Chaucer, Wycliffe, the Lollards.
16. Agincourt—Orleans—Joan of Arc.
17. Wars of the Roses—"The Kingmaker"—Caxton.
- 18.—The New Monarchy—Benevolences.
19. Bosworth—Overthrow of the Feudal System.

MODERN ENGLAND, 1485—TUDOR PERIOD.

1. Henry VII.'s absolute rule—The Star Chamber.
2. Pretenders—Simnel and Warbeck.
3. Discovery of America—Columbus; the Cabots.
4. The New Learning—Colet, Erasmus, More.
5. Flodden Field.
6. Act of Supremacy—Wolsey; Cromwell.
8. Book of Common Prayer—Cranmer.
9. Lady Jane Grey.
10. Mary, Queen of Scots.
11. The Spanish Armada—Raleigh, Drake, Hawkins.
12. Ireland—The East India Company.
13. The Puritans.
14. Spenser—Shakespeare—Bacon.

STUART PERIOD.

1. Divine Right—Gunpowder Plot—Guy Fawkes.
2. The Pilgrim Fathers.
3. Misrule of the King—Eliot, Wentworth, Laud, Hampden, Pym.
4. Forced Loans—Ship Money.
5. Petition of Right.
6. Long Parliament.
7. The Civil War—The Ironsides—Cromwell.
8. Naseby—Execution of Chas. I.—The Commonwealth.
9. Cromwell's Wars—Blake.

10. The Restoration—Bunyan, Milton.
11. Great Plague and Great Fire of London.
12. Test Act—Habeas Corpus Act.
13. Trial of the Seven Bishops.
14. The Revolution—William of Orange.
15. Convention Parliament—Bill of Rights.
16. King William's Wars—Boyne, Glencoe, Treaty of Ryswick.
17. Mutiny Bill—National Debt—Bank of England.
18. Act of Settlement—Addison, Steele, Pope.
19. Queen Ann's War—Marlborough—Treaty of Utrecht.
20. Party Government.

BRUNSWICK PERIOD.

1. The Jacobite Rebellions—Prince Charlie.
2. The Septennial Act.
3. The South Sea Bubble—Walpole.
4. War of the Austrian Succession.
5. Seven Years' War—Clive, Plassey—Wolfe, Quebec.
6. Treaty of Paris.
7. Religious Revival—Whitfield, the Wesleys.
8. Freedom of the Press—John Wilkes, Pitt the Elder.
9. The American Revolution—Bunker's Hill, Saratoga, Yorktown.
10. The Stamp Act—Declaration of Independence—Washington.
11. Hastings, Burke, Fox, Pitt the Younger.
12. Abolition of the Slave Trade—Wilberforce, Clarkson.
13. Union of England and Ireland.
14. French Revolution—Napoleon.
15. War with France—Nile, Trafalgar, Waterloo, Moore, Nelson.
16. The Peninsular War—Wellington.
17. The War of 1812.
18. Catholic Emancipation—O'Connell.
19. The Reform Bills.
20. The Chartists.

21. The Repeal of the Corn Laws—Peel, Cobden, Bright.
22. Disestablishment of the Irish Church.
23. Education Act, 1870.
24. Irish Land Acts.
25. Irish Home Rule—Disraeli, Parnell, Gladstone
26. The Canadian Rebellion—Durham.
27. Crimean War—Florence Nightingale.
28. The Sepoy Mutiny—Cawnpore—Lucknow.
29. The Soudan—Gen. Gordon.
30. The Ballot Act—Redistribution Act.
31. The Queen's Jubilees.
32. The Boer War—Roberts, Kitchener
33. Social and National Progress.
34. The Literature of the Period—Scott, Tennyson, Ruskin.
35. Sketch the origin, growth and decline of Feudalism.
36. Point out the relation of ecclesiastical power to civil power from the Norman period to the present time.
37. Show the value and what led to the great fundamental compacts between the crown and the nation, viz.: Magna Charta, Petition of Right and Bill of Rights.
38. State the origin of the House of Commons; the period during which it was the only ruling body.
39. Trace the changes in regal power from the Conqueror to the present time. During what period was the king the only ruling power?
40. Give the origin of the Cabinet and the National Debt.

ARITHMETIC.

1. Review all preceding courses.
2. Teach decimals, percentage, profit and loss, commission, trade discount, simple interest, true and bank discount.
3. Teach mensuration of rectangle quad, circle, cylinder, and area of a triangle when the base and perpendicular are given.
4. Teach definitions and the correct use of all technical terms and signs or symbols.

WRITING.

1. Review preceding courses; special attention to such movement as will produce both rapidity and legibility.

2. Copy-book No. 6.
3. Business forms.
4. Book-keeping, single entry.

DRAWING.

1. Study of plants, trees, seed-pods, grass, flowers, fruit, vegetables, etc. Paint in flat tones with pencil or color, render in expressive outlines, or make careful pencil studies.
Window sketches—roof studies with chimneys and towns.
Sketches from animals, birds, etc. Outdoor study if convenient.
Simple landscapes.
Figure drawing from the pose.
Compose studies.
2. Study of type solids.
Sketches of familiar objects singly and in groups. Make careful pencil sketches, paying particular attention to perspective and to light and shade.
Render in expressive outline, or in two or three flat tones in scale relation or to express color values.
Special attention to books in different positions.
Groups of objects that tell a story, such as would suggest a journey, a picnic, a proverb, etc.
Care in the drawing of ellipses.
Use pencil measurements for proportion, and compare all slanting lines with a vertical or horizontal.
Pupils led to discover, by observation, the laws underlying angular perspective.
Practice in the use of a finder.
3. Picture studies—Essays.
4. Illustrative and memory drawing in connection with other studies.
5. Line Drill—Special attention to margins.
6. Compare Egyptian, Greek, Roman and Byzantine ornament.
7. Design borders and surface patterns for some definite purpose, using geometric units, motives from nature, (not pictorial), and ink blots.
Initial letters and decorative compositions.
Accurate measurements and division of spaces.
Designs for inlaid wood, grill work, bent iron, etc.
Simple articles of furniture, etc.
Geometric views or working drawings of type solids.
Sections of mouldings, simple objects, furniture, etc.
Pattern making, type models, portfolios, letter-case, etc.
Plans of rooms, houses, etc.

PHYSIOLOGY AND HYGIENE.

1. Review preceding courses.
2. Teach respiration and nervous system

MUSIC

Review the V., VI. and VII. Grade courses.

DRILL AND CALISTHENICS.

Same as Senior III. course.

APPENDIX.

A GUIDE TO TEACHERS IN SELECTING BOOKS FOR THEIR LIBRARIES.

DICTIONARIES.

Standard Dictionary.

Webster's International Dictionary of 1901.

ENCYCLOPAEDIAS.

Chambers' Encyclopaedia, 10 vols., new edition of 1900.

Universal Cyclopaedia, new edition, 12 vols.

GRAMMAR, COMPOSITION, LITERATURE, ETC.

Elements of English Grammar by Brown & De Garmo

English Grammar, Past and Present, by Nesfield.

Historical Outlines of English Accidence, by Dr. Morris

English Composition, by Pearson.

Paragraph Writing, by Scott & Denney.

English Composition and Rhetoric, by Bun.

Short History of English Literature, by Saintsbury.

A Student's History of English Literature, by W. E. Simonds.

Development of the English Novel, by W. T. Cross.

Literary Study of the Bible, by Moulton.

Some Principles of Literary Criticism, by Winchester.

The Interpretation of Literature, by Crawshaw.

HISTORY.

History of the English People, 4 vols., by Green.

Student's History of England, by Gardiner.

History of Scotland, by Andrew Lang

History of Ireland, by W. O'Connor Morris.

Manual of the Constitutional History of Canada, by Sir J. G. B.
irmot.

Documents Illustrative of the Constitution of Canada, by Houston.

History of Canada, by C. G. D. Roberts.

United States of America, by Edward Channing.

History of the American Nation, by A. C. McLaughlin.

GEOGRAPHY.

Elementary Lessons in Physical Geography, by Geikie.

Elementary Physical Geography, by Tarr.

Elementary Physiography, by Thornton.

Physiography for Advanced Students, by Simmons.

The International Geography, by Mill.

Text-book of Commercial Geography, by Adams.

Hand-book of Commercial Geography, by Chisholm.

GEOLOGY.

Elementary Geology, by Tarr.

The Elements of Geology, by Le Conte.

Text-book of Geology, by Geikie.

METEOROLOGY.

A Treatise on Meteorology, by Loomis.

Elementary Meteorology, by Davis.

ASTRONOMY.

Text-book of Astronomy, by Comstock.

Astronomy, Advanced Students, by Newcomb & Holden.

CRYSTALLOGRAPHY.

Elements of Crystallography, by Williams.

BOTANY.

Elementary Botany, by Atkinson.

Structural Botany, by Gray.

Lessons with plants, by Bailey.

Flora of the Northern United States and Canada, by N. L. Britton.

ZOOLOGY.

Animal Life, a First Book of Zoology, by Jordan and Kellog.

Outlines of Zoology, by J. Arthur Thomson.

Text-book of Zoology, by Parker & Haswell.

BIOLOGY.

General Biology, by Sedgwick & Wilson.

Elementary Biology, by T. Jeffrey Parker.

BACTERIOLOGY.

The Principles of Bacteriology, by Dr. F. Hueppe.

Manual of Bacteriology, by Muir & Ritchie.

CHEMISTRY.

Elementary Chemistry, by Muir & Slater.

Inorganic Chemistry, Advanced Course, by Remsen.

Organic Chemistry, by Noyes.

Practical Methods of Organic Chemistry, by Gattermann.

Physical Chemistry for Beginners, by Van Deventer.

Introduction to Physical Chemistry, by Walker.

Elements of Physical Chemistry, by Jones.

Elements of Qualitative Analysis, by W. A. Noyes.

GENERAL PHYSICS.

Physics, by Slate.

Theory of Physics, by Ames.

Physics, Advanced Course, by Barker.

Ganot's Physics, by Atkinson & Reinold.

SPECIAL PHYSICS.

Statics, by Glazebrook.

Dynamics, by Glazebrook.

Hydrostatics, by Glazebrook.

Heat, by Glazebrook.

Advanced Heat, by Edser.

Heat as a Mode of Motion, by Tyndall.

Light, by Glazebrook.

Light, by R. W. Stewart.

Sound, in its Relation to Music, by Blaserna.

Sound, by Poynting & Thomson.

Sound and Music, by Sedley Taylor.

Magnetism and Electricity, by Sylvanus P. Thompson.

NATURE STUDY.

The Nature Study Idea, by L. H. Bailey.

Study of Animal Life, by Thompson.

Nature Study and Life, by Hodge.

DRAWING.

Elementary Drawing Simplified, by Augsburg.

Freehand Drawing, by Cross.

Light and Shade, by Cross.

Suggestions for Instructions in Color, The Prang Educational Co.

School of Art Perspective, by Andrews.

Complete Perspective Course, by Spanton.

Geometrical Drawing for Art Schools, by Spanton.

DOMESTIC SCIENCE.

Elements of the Theory and Practice of Cooking, by Williams & Fisher.

Chemistry of Cooking, by Williams.

MANUAL TRAINING.

Raphia and Reed Weaving, by Knapp.

The Sloyd System of Wood-working, by Hoffman.

The Theory of Educational Sloyd, by Otto Salomon.

PHILOSOPHY.

Introduction to Philosophy, by Kulpe.

Introduction to Philosophy, by Paulsen.

An Outline of Philosophy, by Watson.

History of Philosophy, by Weber.

History of Philosophy, by Schwegler.

PSYCHOLOGY.

Outlines of Psychology, by Sully.

Outlines of Descriptive Psychology by Ladd.

Manual of Psychology, by Stout.

Outlines of Psychology, by Kulpe.

The Principles of Psychology, by James.

Introduction to Physiological Psychology, by Ziehen.

Outlines of Physiological Psychology, by Ladd.

ETHICS.

LATER INTUITIONALISM.

Hand-book of Moral Philosophy, by Calderwood.

Types of Ethical Theory, by Martineau.

UTILITARIANISM.

Utilitarianism, by John Stuart Hill.

Methods of Ethics, by Sidgwick.

Progressive Morality, by Fowler.

EVOLUTIONARY ETHICS.

Science of Ethics, by Leslie Stephen.

Moral Order and Progress, by Alexander.

IDEALISTS.

The Elements of Ethics, by Muirhead.

A Manual of Ethics, by Mackenzie.

Ethics of Naturalism, by Sorley.

Prolegomena to Ethics, by Green.

LOGIC.

Elementary Lessons in Logic, by Jevons.

The Essentials of Logic, by Bosanquet.

The Elements of Logic, by Hyslop.

System of Logic, by John Stuart Mill.

SOCIOLOGY.

An Introduction to Sociology, by Fairbanks.

The Principles of Sociology, by Giddings.

POLITICAL ECONOMY.

Political Economy, Advanced Course, by Walker.

Principles of Political Economy, by Gide.

Outlines of Economics, by Ely.

Principles of Economics, Vol. II. not ready, by Marshall.

READING.

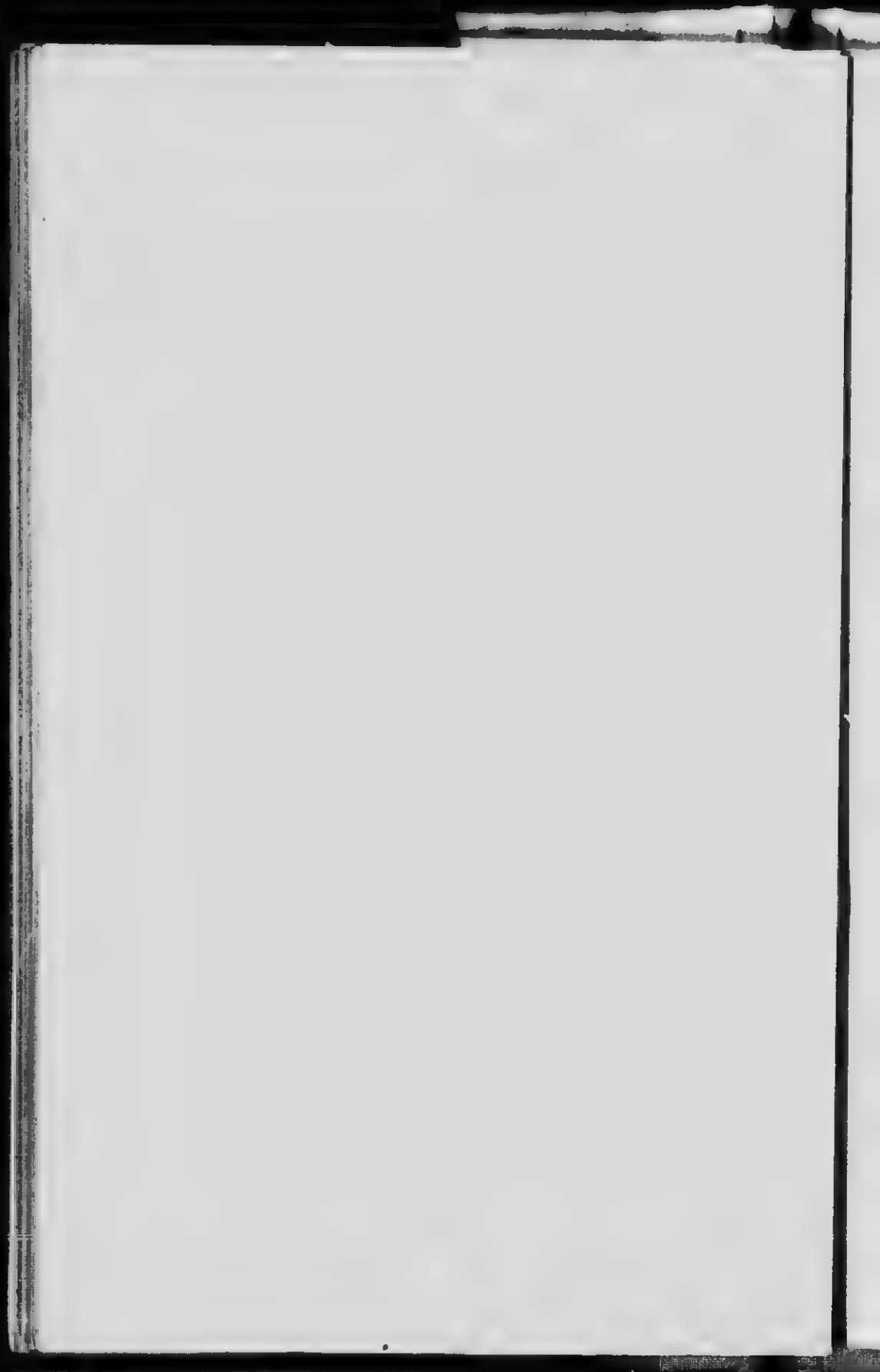
How to Teach Reading in the Public Schools, by S. H. Clark.

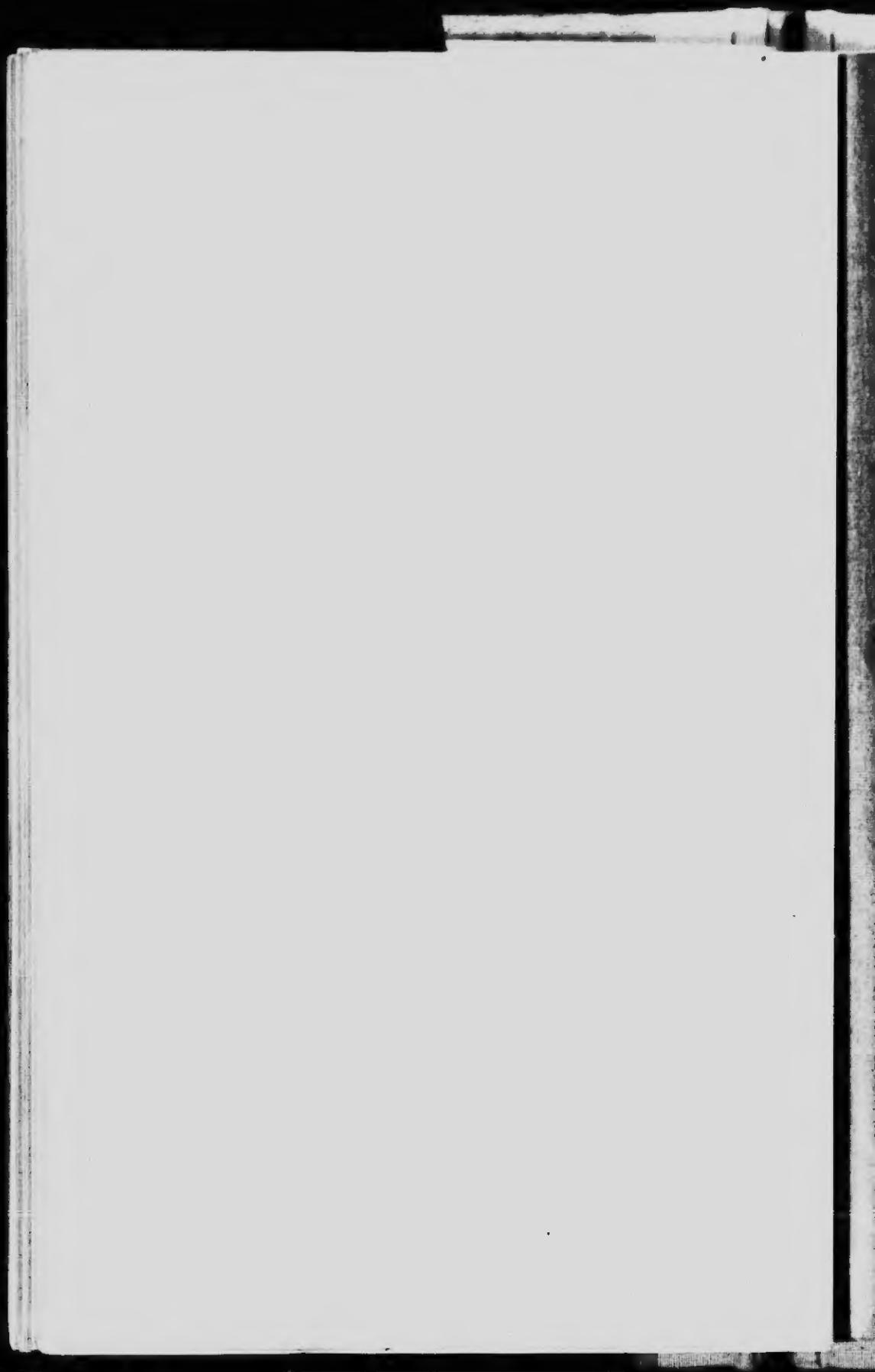
Voice and Spiritual Education, by Corson.

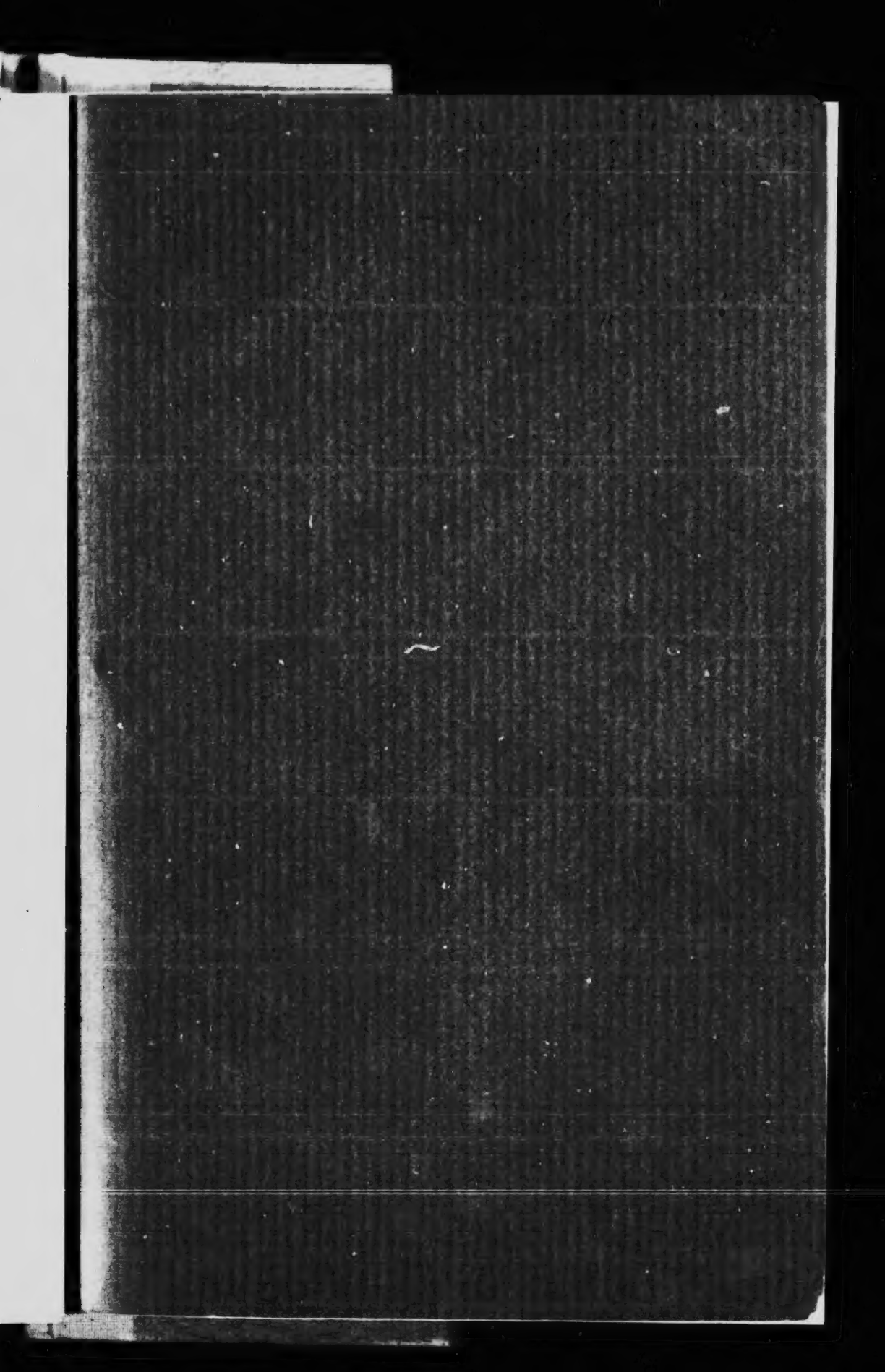
Aims of Literary Style, by Corson.

TEACHING.

- Institutes of Education, by Laurie.
Talks to Teachers on Psychology, by James.
Education as a Science, by Bain.
• Education of the Young in the Republic of Plato, by Bosanquet.
Philosophy of Education, by Rosenkranz.
Essentials of Method, by De Garmo.
Teaching the Language Arts, by Hinsdale.
Teaching of English, by Chubb.
How to Study and Teach History, by Hinsdale.
Teaching of Elementary Mathematics, by Smith.
Psychology of Number, by McLellan.
Teaching of Geography, by Geikie.









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